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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,261	07/26/2001	David A. Orbits	40062.91US01	7808

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EXAMINER

ABEL JALIL, NEVEEN

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,261

Inventor(s)

ORBITS ET AL.

Examiner

Neveen Abel-Jalil

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-17 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.

- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DOV POPOVICI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. The amendment filed on July 22, 2003 has been received and entered. Claims 1-20 are pending. Claims 1-6 and 18-20 are rejected. Claims 7-17 are allowed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Norin et al. (U.S. Patent No. 5,787,247).

As to claim 1, Norin et al. discloses a computer-implemented (See column 34, lines 14-20) method of replicating data from a first member of a replica set to a second member of a replica set (See column 8, lines 1-29), comprising:

creating a manifest file at the first member (See column 9, lines 14-50, wherein “manifest file” reads on “dataset” including listed six entries in lines 35-40), the manifest file including an identifier for each of a plurality of resources that exist at the first member (See column 9, lines 50-65, wherein “manifest file” reads on “data set” including listed six entries in lines 35-40);

causing the manifest file to be reproduced at the second member of the replica set;

in response to the manifest file being reproduced at the second member (See column 10, lines 9-27, wherein “be reproduced” reads on “replication of the data set”, and wherein “second member” reads on “replica nodes”),

identifying whether each resource identified in the manifest file exists at the second member (See column 15, lines 36-60, wherein “identifying whether each resource” reads on initiated when a certain event occurs or when or more conditions are satisfied”, and wherein “second member” reads on replica nodes”); and

if a first resource identified in the manifest file does not exist at the second member, preventing a second resource identified in the manifest file from being executed until the first resource does exist at the second member (See column 16, lines 15-65, also see column 5, lines 23-61, wherein “the manifest file does not exist” reads on removal of the data set”, and wherein “second member” reads on “replica node”, and wherein “executed” reads on “add function”).

As to claim 2, Norin et al. discloses wherein identifying whether each resource exists at the second member includes comparing information in the manifest file with information stored at the second member (See column 14, lines 1-24, wherein “manifest file” reads on “data set”), the information stored at the second member identifying a plurality of resources stored at the second computer (See column 2, lines 40-49, wherein “second computer” reads on computer on “network”).

As to claim 3, Norin et al. discloses wherein the identifier for each resource includes a version identifier associated with the resource (See column 9, lines 66-67, and column 10, lines 1-6, wherein "resource" reads on "data set properties").

As to claim 4, Norin et al. discloses wherein identifying whether each resource exists at the second member includes comparing the version identifier for the resource with another version identifier associated with another copy of the resource stored at the second member (See column 9, lines 66-67, and see column 10, lines 1-15, also see column 29, lines 55-67).

As to claim 5, Norin et al. discloses further comprising if the first resource does not exist at the second member, awaiting receipt of the first resource at the second member and (See column 16, lines 15-35, wherein "does not exist" reads on "may be safely deleted", and wherein "awaiting receipt" reads on "verifying"), in response to receiving the first resource at the second member, executing the second resource (See column 5, lines 39-53, wherein "executing" reads on "access").

As to claim 6, Norin et al. discloses further comprising if the first resource does not exist at the second member (See column 10, lines 53-67), awaiting receipt of every resource identified in the manifest file 9See column 10, lines 8-15, wherein "manifest file" reads on "dataset"), and in response to a final resource identified in the manifest file being received at the second member, executing the second resource (See column 5, lines 39-53, wherein "executing" reads on "access").

As to claim 18, Norin et al. discloses a computer-readable medium having computer-executable instructions (See column 34, lines 14-23, wherein “executable instructions” reads on “code”) for facilitating the replication of data from a first member of a replica set to a second member of the replica set (See column 8, lines 1-29), comprising:

receiving a notice that a resource in a group of resources is being modified, the group of resources being interrelated such that a proper functioning of the group of resources is dependent on a similar version of each resource in the group of resources coexisting (See column 8, lines 65-67, and column 9, lines 1-13, wherein “receiving a notice” reads on “broadcasts new changes”, and wherein “similar version” reads on “having a copy”);

in response to the notice, issuing an instruction to create a manifest file; and adding to the manifest file an identifier for each resource in the group of resources (See column 9, lines 50-65, wherein “manifest file” reads on “data set” including listed six entries in lines 35-40).

As to claim 19, Norin et al. discloses wherein adding the identifier for each resource to the manifest file further comprises adding to the manifest file a globally-unique identifier for each resource (See column 9, lines 15-60, wherein “adding” reads on “each ID could be drawn from the globally...clock”, and wherein “manifest file” reads on “data set” including six entries in lines 35-40).

As to claim 20, Norin et al. discloses wherein adding the identifier for each resource to the manifest file further comprises adding to the manifest file a version identifier for each

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resource (See column 9, lines 54-67, and column 10, lines 1-6, wherein "incremented every time an ID is assigned", and wherein "manifest file" reads on "data set").

Allowable Subject Matter

4. Claims 7-17 are allowed over the prior art of record.
5. The following is a statement of reasons for the indication of allowable subject matter:

Parthesarathy et al. (U.S. Patent No. 6,353,926) a method for software update using GUID representing the unique identifier to each version but Parthesarathy et al. does not indicate the software update based on the specific four claimed fields as identified in claim 7.

The prior art of record Norin et al. U.S. Patent No. 5,787,247, and Parthesarathy et al. (U.S. Patent No. 6,353,926) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), a first field identifying the data structure as a special data structure; and

a second field identifying a plurality of resources, at least two of the plurality of resources being necessary for a proper functioning of the plurality of resources,

wherein, in response to determining that the data structure is a special data structure based on the information stored in the first field, a service determines whether each of the plurality of resources exists on the computer-readable medium, and if not, delays access to the

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plurality of resources, as claimed in Independent claim 7 in conjunction with remaining claims provisions.

The dependent claims 8-17, being further limiting to the independent claims, definite and enabled by the Specification are also allowed.

Response to Arguments

6. Applicant's arguments filed on 22-July-2003 have been fully considered but they are not persuasive.

Applicant's argument that "Norin et al. dose not disclose preventing execution of a second resource until the second member receives the first resource" is respectfully acknowledged but is not deemed to be persuasive.

Examiner's response is that Norin et al. discloses terminating user access to the data set to prevent an new changes from being made to the data set during the removal process (See column 5, lines 3-22). Norin et al. also teaches in column 20, lines 47-65, access requests to that replica node can be halted when the replica at another node is in a different state (i.e. delete pending state). Norin et al. also teaches lock local copy to prevent all access to the dataset indicating lock is initiated on current state prior to taking action with a new state in column 27, lines 17-45.

Applicant's argument that "Norin et al. does not disclose that identifying whether each resource exists at a member (such as a computer) includes comparing information in a manifest

file with information stored at the member” is fully acknowledged but is not deemed to be persuasive.

Examiner’s response is that Norin et al. indeed states information comparison in column 14, lines 14-25, wherein the time stamp is used to verify the latest most up-to-date information being replicated. Norin et al. teaches in column 23, lines 33-49, comparison between change set in the replica and the local copy change set.

Applicant’s argument that “Norin et al. does not disclose awaiting the receipt of a resource and then executing the resource when the resource is received” is fully acknowledged but is not deemed to be persuasive.

Examiner’s response is that Norin et al. indeed states acknowledgement upon the receipt of replica data prior to execution in column 23, lines 43-49, and see column 24, lines 9-51, wherein time-based expiration tied to a verification process is taught by Norin et al. showing pending packet and operation based on previous replica node action. Norin et al. also states awaiting response to verify that exchange of information did take place see column 21, lines 63-67, and column 22, lines 1-12.

Applicant’s argument that “Norin et al. does not teach issuing an instruction to create a manifest file in response to the modification of a resource in a resource group” is fully acknowledged but is not deemed to be persuasive.

Examiner’s response is that Norin et al. indeed states creating a manifest file by listing location and ID of replica node in a list in column 13, lines 14-56 also see claim 24 language.

Ownership of the data set is tracked in Norin et al. column 14, lines 61-67, and column 15, lines 1-8. Norin et al. also teaches that each replica node receives information about the status and participation of all other replica nodes in the enterprise.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

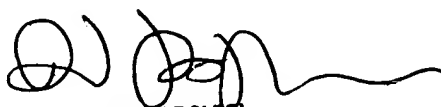
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Neveen Abel-Jalil



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